

Stanford



Kevin Wilkins

Postdoctoral Research Fellow, Neurology and Neurological Sciences

Bio

BIO

Kevin obtained a PhD in Neuroscience from Northwestern University while working in the Physical Therapy and Human Movement Sciences Department and a BS/BA in Psychology and English from Boston College. His dissertation research focused on understanding the neural mechanisms underlying upper extremity impairments in individuals with chronic stroke and subsequent motor improvements following novel interventions. His postdoctoral work at Stanford with Dr. Helen Bronte-Stewart focuses on the neural features associated with gait impairment in individuals with Parkinson's disease using a combination of structural imaging, neurophysiology, and kinematic analysis. He was awarded a Postdoctoral Fellowship for Basic Scientists from the Parkinson's Foundation to investigate the cognitive correlates of gait impairment in Parkinson's disease.

PROFESSIONAL EDUCATION

- Bachelor of Arts, Boston College , English (2014)
- Doctor of Philosophy, Northwestern University , Neuroscience (2019)
- Bachelor of Science, Boston College , Psychology (2014)

STANFORD ADVISORS

- Helen Bronte-Stewart, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Limited capacity for ipsilateral secondary motor areas to support hand function post-stroke** *JOURNAL OF PHYSIOLOGY-LONDON*
Wilkins, K. B., Yao, J., Owen, M., Karbasforoushan, H., Carmona, C., Dewald, J. A.
2020; 598 (11): 2153–67
- **Coordination of multiple joints increases bilateral connectivity with ipsilateral sensorimotor cortices** *NEUROIMAGE*
Wilkins, K. B., Yao, J.
2020; 207: 116344
- **Neural Closed loop deep brain stimulation for freezing of Gait.** *Brain stimulation*
Petrucci, M. N., Neuville, R. S., Afzal, M. F., Velisar, A., Anidi, C. M., Anderson, R. W., Parker, J. E., O'Day, J. J., Wilkins, K. B., Bronte-Stewart, H. M.
2020
- **Intervention-induced changes in neural connectivity during motor preparation may affect cortical activity at motor execution.** *Scientific reports*
Wilkins, K. B., Dewald, J. P., Yao, J.
2020; 10 (1): 7326

- **Improving Hand Function of Severely Impaired Chronic Hemiparetic Stroke Individuals Using Task-Specific Training With the ReIn-Hand System: A Case Series** *FRONTIERS IN NEUROLOGY*
Camona, C., Wilkins, K. B., Drogos, J., Sullivan, J. E., Dewald, J. A., Yao, J.
2018; 9: 923
- **Nucleus accumbens mu opioid receptors regulate context-specific social preferences in the juvenile rat** *PSYCHONEUROENDOCRINOLOGY*
Smith, C. W., Wilkins, K. B., Li, S., Tulimieri, M. T., Veenema, A. H.
2018; 89: 59–68
- **Neural Plasticity in Moderate to Severe Chronic Stroke Following a Device-Assisted Task-Specific Arm/Hand Intervention** *FRONTIERS IN NEUROLOGY*
Wilkins, K. B., Owen, M., Ingo, C., Carmona, C., Dewald, J. A., Yao, J.
2017; 8: 284